

Application No.: 10/776390

Case No.: 59516US002

Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) An optical system comprising an image-forming device and an illumination system configured and disposed for illuminating the image-forming device, the illumination system comprising: a light source module, a first meniscus lens having a convex side and a concave side and a second meniscus lens having a convex side and a concave side; wherein the concave side of the second meniscus lens is adjacent to the convex side of the first meniscus lens and the concave side of the first meniscus lens faces the light source module for receiving light therefrom.
2. (Currently Amended) The ~~illumination~~optical system as recited in claim 1, wherein the first meniscus lens is in contact with the second meniscus lens.
3. (Currently Amended) The ~~illumination~~optical system as recited in claim 1, wherein the first and second meniscus lenses are held together by an optically clear material.
4. (Currently Amended) The ~~illumination~~optical system as recited in claim 1, wherein the light source module comprises an emitting surface and a substantially optically clear dome disposed over the emitting surface.
5. (Currently Amended) The ~~illumination~~optical system as recited in claim 1, wherein the light source module comprises an emitting surface and a pyramid collector disposed over the emitting surface.

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6. (Currently Amended) The ~~illumination~~optical system as recited in claim 5, wherein the pyramid collector has a generally square proximate end and a generally rectangular distal end.
7. (Currently Amended) The ~~illumination~~optical system as recited in claim 1, wherein the light source module comprises a plurality of emitting surfaces disposed next to each other and the concave side of the first meniscus lens faces the emitting surfaces of the light source module for receiving light therefrom.
8. (Currently Amended) The ~~illumination~~optical system as recited in claim 7, wherein at least two of the emitting surfaces have different colors.
9. (Currently Amended) The ~~illumination~~optical system as recited in claim 6, wherein the light source module has emitting surfaces of first, second and third colors.
10. (Currently Amended) The ~~illumination~~optical system as recited in claim 9, wherein the first, second and third colors are primary colors.
11. (Currently Amended) An illumination system, comprising:
a plurality of light source modules and
a system of optical elements comprising a plurality of pairs of meniscus lenses, each pair being associated with a light source module and including a first meniscus lens having a convex side and a concave side and a second meniscus lens having a convex side and a concave side; wherein the concave side of each second meniscus lens is adjacent to the convex side of each first meniscus lens and the concave side of each first meniscus lens faces the associated light source module for receiving light therefrom; and wherein all first meniscus lenses have substantially the same shape and size and all second meniscus lenses have substantially the same shape and size.
12. (Original) The illumination system as recited in claim 11, wherein each first meniscus lens is in contact with each second meniscus lens.

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13. (Original) The illumination system as recited in claim 11, wherein the plurality of the pairs of meniscus lenses is configured substantially as a double-layered hexagonal closely packed array and the plurality of light source modules is disposed to substantially track that configuration.

14. (Original) The illumination system as recited in claim 11, wherein the plurality of the pairs of meniscus lenses is configured substantially as a double-layered rectangular closely packed array and the plurality of light source modules is disposed to substantially track that configuration.

15. (Currently Amended) ~~The illumination system as recited in claim 11,~~ An illumination system, comprising:

a plurality of light source modules and

a system of optical elements comprising a plurality of pairs of meniscus lenses, each pair being associated with a light source module and including a first meniscus lens having a convex side and a concave side and a second meniscus lens having a convex side and a concave side; wherein the concave side of each second meniscus lens is adjacent to the convex side of each first meniscus lens and the concave side of each first meniscus lens faces the associated light source module for receiving light therefrom; wherein all first meniscus lenses have substantially the same shape and size and all second meniscus lenses have substantially the same shape and size; and wherein the plurality of the light source modules is disposed within a non-radially symmetrical aperture.

16. (Original) The illumination system as recited in claim 15, further comprising an image-forming device disposed for being illuminated at an angle and having a plurality of mirrors rotatable about a pivot axis, and wherein the non-radially symmetrical aperture has a long dimension and a short dimension and is oriented so that the long dimension is aligned with the pivot axis of the mirrors of the image-forming device.

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17. (Original) The illumination system as recited in claim 11, wherein each light source module comprises an emitting surface and a substantially optically clear dome disposed over the emitting surface.
18. (Original) The illumination system as recited in claim 11, wherein each light source module comprises an emitting surface and a pyramid collector disposed over the emitting surface.
19. (Original) The illumination system as recited in claim 18, wherein each pyramid collector has a generally square proximate end and a generally rectangular distal end.
20. (Original) The illumination system as recited in claim 19, further comprising an image-forming device disposed for being illuminated at an angle and having a plurality of mirrors rotatable about a pivot axis, and wherein the plurality of light source modules is disposed in an array having a shape generally approximating a non-radially symmetrical aperture having a long dimension and a short dimension, said non-radially symmetrical aperture oriented so that the long dimension is aligned with the pivot axis of the mirrors of the image-forming device.
21. (Original) The illumination system as recited in claim 19, further comprising an illumination target and wherein the system of optical elements is configured to image the distal end of each pyramid collector onto the illumination target.
22. (Original) The illumination system as recited in claim 11, wherein the light source modules each have a plurality of emitting surfaces disposed next to each other and so that the concave side of each first meniscus lens faces the emitting surfaces of the associated light source module for receiving light therefrom.
23. (Original) The illumination system as recited in claim 22, wherein at least two emitting surfaces of at least one light source module have different colors.

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24. (Original) The illumination system as recited in claim 22, wherein each light source module has emitting surfaces of first, second and third colors.

25. (Original) The illumination system as recited in claim 24, wherein the first, second and third colors are primary colors.

26. (Original) The illumination system as recited in claim 22, further comprising an illumination target comprising first, second and third color zones, and wherein the system of optical elements images the emitting surfaces of the first, second and third colors onto the respective color zones of the illumination target.

27. (Original) The illumination system as recited in claim 26, wherein the system of optical elements further comprises a lenticular array disposed between the illumination target and the plurality of pairs of meniscus lenses.